

Notice of Allowability

Application No.

10/045,564

Examiner

Jacob Petranek

Applicant(s)

LLOYD, STACEY G.

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/10/2007.
2. ☒ The allowed claim(s) is/are 1-5, 7, 8 and 10-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Dryja on 2/7/2007.

The application has been amended as follows:

Change claim 8 line 17 to:

in a match; [[and]]

Change claim 8 line 19 to:

alternative responsive output[.]; and (replace period with semicolon, insert "and")

Add to the end of claim 8:

executing the corrected transaction results.

Change claim 11 line 17 to:

multiplexer represents the redirected response for the operation; [[and]]

Change claim 11 line 19 to:

preprogrammed list of responses[.]; and (replace period with semicolon, insert "and")

Add to the end of claim 11:

executing the redirected response of the operation.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

Independent claims 1, 8, 11, 14, 16, and 18 were previously rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al, (U.S. 5,796,972), in view of Handy ("The Cache Memory Book", 2nd ed.), in view of Dockser (U.S. 6,006,030). In this rejection, element 292 of Johnson is a decoder that uses a look-up table to decode instructions. Handy was used to modify element 292 to make it a content addressable memory (CAM) that would be a fully-associative memory, instead of the direct-mapped memory of Johnson. Dockser was used to modify the CAM to mask off irrelevant bits of the instruction used to index into the CAM.

Applicant argues that there is no motivation to combine Dockser with Johnson and Handy. This argument is persuasive for the following reason. The applicant asks where the irrelevant bits are when making this modification. The irrelevant bits would be all of the bits of the instruction that aren't the opcode of the instruction. However, one of ordinary skill in the art would realize that these bits don't need to be masked off and could simply be redirected around the CAM instead of being input into the CAM. Thus, Dockser doesn't read upon the limitation "by employing a masking register that filters the at least some of the identifying information of the operation for output to the comparator, the masking register being logically AND'ed with all the identifying information of the operation and having binary ones corresponding to the at least some of the identifying information to output to the comparator and binary zeros

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corresponding to other of the identifying information not output to the comparator." This limitation is also not found in the prior art, which makes the case allowable.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Petranek whose telephone number is 571-272-5988. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacob Petranek
Examiner, Art Unit 2183


EDDIE CHAN
SUPERVISORY PATENT EXAMINER
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